

FY 2001 BLUEBOOK ERRATA DATA

CLARIFICATIONS

| Subsection Title | Explanation of Change | Page # or Chart Ref |
|--|--|------------------------------------|
| Section 1: Executive Summary | | |
| Lands Legacy Initiative | The total of \$265.8 million for Lands Legacy does not include -\$2.5 million for Fisheries Habitat Restoration. Only new increases are shown. If both increases and decreases are shown, then the total is \$263.3 million. | 13, 15 |
| Polluted Runoff Grants | The increase of \$2 million will not complete State Nonpoint Pollution Control programs, but will aid in the <i>continued development to accelerate completion</i> . | 16 |
| Enforcement and Surveillance | The \$4.5 million for Enforcement and Surveillance activities includes \$1.3 million for vessel monitoring programs; \$0.2 million for ESA and Marine Mammal recovery; \$0.5 million for salmon-related enforcement activities (not currently shown); and \$2.5 million to establish cooperative enforcement programs. | 56 |
| Section 2: Budget by Line Office | | |
| Suitland/ Infrastructure | The advanced appropriation of \$15.2 million, includes \$14.7 million for the NESDIS Suitland facility, and \$0.5 million for NWS/NCEP relocation planning (details omitted in the current version). | 83 |
| Section 3: Budget by Strategic Plan Element | | |
| Key Performance Measures | Publication software made some automatic footnote designations, which conflict with the footnote explanations. Change the letters in the chart as follows: A=1, B=2, C=3, D=4, E=5, and F=6, to match the footnote explanations. | 120 |
| Key FY 2001 Activities | NOAA will establish a Coastal Impact Assistance account to assist <i>eligible</i> coastal states. The current version does not specify "eligible". | 136 |
| Section 4: Supplemental Information | | |
| New chart added | A tracking table that includes the total program for the South Florida Initiative was not previously included. <i>A copy of that chart is attached for your convenience.</i> | Last chart in Section 4 |

FY 2001 BLUEBOOK ERRATA DATA

CORRECTIONS

| Subsection Title | Explanation of Change | Page # or Chart Ref |
|--|---|--|
| Section 1: Executive Summary | | |
| NOAA Budget Growth | During software conversion, the bar in the chart for FY 2001 was inadvertently cut off. This has been added back in a revised chart. <i>A copy of the revised chart is attached.</i> | 8 |
| Resource Protection | "Steller sea lions" should not be included as part of the new initiative. There was no additional funding under Resource Protection; however, \$2.29 million is in our base. | 30 |
| Pacific Salmon Treaty | In the sentence referring to ". . . \$20 million to the State of Washington to complete the Vessel License Buyback Program . . .", delete the phrase "and the state of Alaska", since Alaska is not included in this vessel license buyback. | 31 <i>See also: FY 2001 Presidential Budget Narrative, pg 697</i> |
| Section 2: Budget by Line Office | | |
| National Marine Fisheries Service | The Full-Time Equivalents (FTE) for Coral Reefs were mistakenly shown in NE Fisheries Management. They have been moved. Protected Species Management FTE numbers have been updated. The figures referred to are also in the FY2001 Crosscut Initiative Chart in Section 4. <i>Copies of the revised charts are attached.</i> | 60a, 60b, and 60d, and FY 2001 Crosscut Initiative Chart |
| Office of Oceanic and Atmospheric Research | Narrative and funding for "Boulder Rent" (pg 69), the \$1,500,000 increase, and the resulting \$5,350,000 total, should be displayed in Facilities, rather than OAR. The revised Total Request for OAR (pg 61) is \$313,510,000. The revised ORF total is \$302,510,000, which still represents an increase of \$4,893,000 over the FY 2000 appropriation. The revised request consists of program increases (pg 63) of \$27,866,000 and program decreases of \$22,973,000. <i>Copies of the revised charts are attached.</i> | Text change on pages: 61, 63, and 69 Chart revision: page 70b |
| Facilities | Narrative and funding for "Boulder Rent", \$1,500,000 increase, \$5,350,000 total, should be displayed in Facilities, rather than OAR. For Facilities, the revised Total Request becomes \$14,452,000, and ORF is then \$11,452,000. <i>Copies of the revised charts are attached.</i> | Text change on page 89 Page 90 (insert paragraph from page 69) Chart revision: page 90a |
| Section 3: Budget by Strategic Plan Element | | |
| Advance Short-Term Warning and | In "Key Performance Measures", due to the differences between actuals vs. projections, "Hours for Hurricane | 103 |

| | | |
|---|--|--|
| Forecast Services Chart | Warnings-Lead Time for 1999 (prelim)" should be 23, as opposed to the 19 hours currently shown. | |
| Implement Seasonal to Interannual Climate Forecast | Software conversion resulted in the deletion of the last part of the final sentence on page 105. Add "related impacts spanning short (one-week) to long (multi-season) time scales." to complete the sentence. | 105 |
| Subsection Title | Explanation of Change | Page # or Chart Ref |
| Section 3: Budget by Strategic Plan Element (Continued) | | |
| Other accomplishments included: | Software conversion resulted in the deletion of part of the last bullet on page 107, and then duplicated the full bullet at the top of page 108. Delete the remainder of the partial bullet on page 107. | 107 |
| Sustain Healthy Coasts | In "Key Performance Measures," a publication software aberration caused the deletion of the last zero in one entry. In the 1999 Actual column, in the entry "Protection/ Restoration of Coastal Habitats (cum) - # Acres Restored," the number should read <i>43,000</i> . | 138 |
| Section 4: Supplemental Information | | |
| National Ocean Service | In the print processing, some pages of this chart came out of order and/or the headings were incorrect. <i>A copy of the complete revised chart is attached.</i> | FY 2001 Crosscut Initiative Chart |
| Oceanic and Atmospheric Research | In the FY 2001 President's Request column, "Ocean Climate Variability" should be [\$2,000] and "Climate Change Research Center" should be blank. "Radiophysics Lab of Dartmouth College" is changed from [\$6,082] to zero, and the amount previously shown is now included in base. <i>A copy of the revised chart is attached.</i> | FY 2001 Crosscut Initiative Chart |
| Summary of NDRI Initiative - FY2001 Request | In the publication processing, the line for NEXRAD Operations and Environmental Observing Services (EOS) was inadvertently excluded. AWIPS Increase/Decrease amount is \$6.5M rather than \$6.6M due to rounding. The new Increase/Decrease total for NDRI is \$110.0M. <i>A copy of the revised chart is attached.</i> | Summary of NDRI Initiative - FY2001 Request chart |
| New Charts Attached | | |
| NOAA Budget Growth: FY 1971 - FY 2001 | | Sec 1, Pg 8 |
| NOAA FY 2001 Budget Request - National Marine Fisheries Services | | Sec 1, Pg 60b, 60c, and 60d |
| NOAA FY 2001 Budget Request - Oceanic and Atmospheric Research | | Sec 1, 70b |

| | |
|---|----------------------------------|
| NOAA FY 2001 Budget Request - Facilities | Sec 1, 90a |
| FY 2001 Crosscut Initiatives | Sec 4, 3rd set |
| Summary of NDRI Initiative - FY 2001 Request | Sec 4, 7th set |
| NOAA South Florida Program - FY 2001 Request | Sec 4, End |

Advance Short-Term Warning and Forecast Services

Total Request: \$

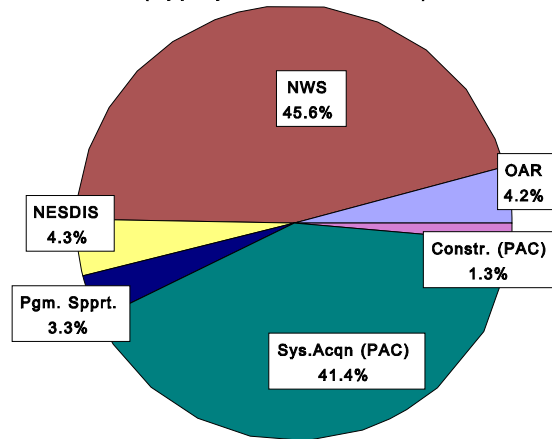


Vision - NOAA's vision for 2005 is to provide significantly improved short-term warning and forecast products and services that enhance public safety and economic productivity to the Nation. NOAA will enhance its ability to observe, understand, and model the environment, and effectively disseminate products and services to users.

Challenge - Our environment has profound effects on human welfare and economic well being. Each year, hundreds of lives and billions of dollars are lost due to severe storms, floods and other natural events that can be predicted minutes to months in advance. NOAA's current ability to predict short-term change is restricted by observations that are incomplete in time and space. This limits the ability to improve basic understanding, and predictive modeling of weather and other natural phenomena. NOAA is committed to improving its observing systems, developing a better understanding of natural processes, and enhancing its predictive models and dissemination systems.

Participation by Activity

(Appropriations Structure)



Implementation Strategy - The objectives of this goal are to:

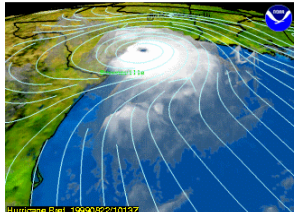
- Sustain modernized weather service operations
- Maintain continuous operational satellite coverage critical for warnings and forecasts
- Strengthen observing and prediction systems
- Improve customer service to the public, emergency managers, the media, and private forecasters.

ASTWFS

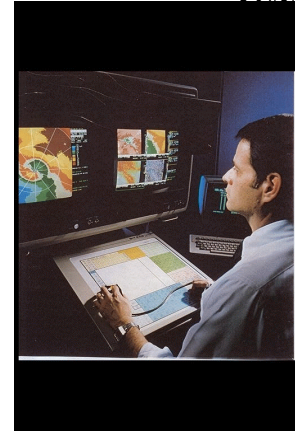
Benefits - Increasing our understanding of the environment through research and investing in new technologies will provide more accurate and timely weather warnings and forecasts required by the Nation. Improved geomagnetic forecasts will increase efficiencies for satellite operations and communications and electronic power distribution networks. Advanced modeling techniques and more complete observations will reduce uncertainties in hurricane track prediction, saving millions of dollars, and will improve inland flood prediction, saving lives and property. Accurate outlooks of future conditions will provide better information for planning weather sensitive activities over land and ocean. Critical contributions for the Administration's Natural Disaster Reduction Initiative will be provided from the research, monitoring and operational program in this NOAA goal.

Improvements associated with the modernized weather services have allowed for huge dividends. A cost-benefit analysis by the National Institute of Standards and Technology estimated economic benefits to the Nation to be about eight times greater than the costs involved. The Nation should realize annual benefits approaching \$7 billion from the modernization. It is now time to take full advantage of the modernization.

FY 1999 Accomplishments:

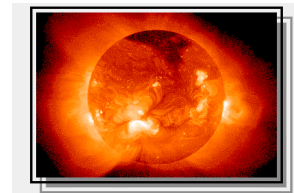
- *First Official Hurricane Outlook Verifies:* In May 1999, a team of NOAA scientists accurately issued their first-ever hurricane season forecast, which called for an "above average" season of more than 10 tropical storms, six hurricanes, and at least three "major" hurricanes (Category 3 or higher on the Saffir-Simpson Hurricane Scale with winds 111 mph or higher).
Indeed, 1999 was busier than normal in all respects, with 12 tropical storms (avg. 10), eight which became hurricanes (avg. 6), and five major hurricanes (avg. 2).
- *Hurricane Floyd:* Hurricane Floyd paralleled the east coast from Florida to South Carolina before making landfall near Cape Fear, NC on September 16, 1999. Triggering the largest civilian evacuation in U. S. history, Hurricane Floyd produced massive inland flooding where there were over 50 deaths (making Floyd the deadliest U. S. hurricane since Agnes, 1972). NWS forecasters successfully forecasted the northerly turn of the Category 4 storm 100 miles from the Florida coastline and the new "Threats Assessment" Outlook identified areas of heavy rain and flooding potential more than a week in advance. NOAA probed the storm with new airborne radiometers, measuring water vapor, precipitation, and surface winds. Their observations were coordinated with surface measurements for verification.

- May Central Plains Tornado Outbreak:* Violent F-4 and F-5 tornadoes occurred in Oklahoma and Kansas during May 1999. Although 47 people died, countless lives were saved as a direct result of early warnings and new technology installed during the NWS modernization. NWS offices issued over 100 warnings with an average lead time of 21 minutes (compared to the national average of 11 minutes). The Advanced Weather Interactive Processing System (AWIPS) NOAA Weather Radio (NWR), the Warning Decisions Support System (WDSS), and wind profiler radar were critical to the success of the warning process. During the event, a shift supervisor at a plastics company in Wichita, KS heard the tornado warning over an on-site NWR. 100 workers went to the basement of the building as the company activated its tornado plan. The plant was destroyed, yet there were no injuries. The NWS received a Humanitarian Award from Oklahoma Governor Frank Keating for the outstanding services provided to the citizens of Oklahoma.
- Record-Breaking January Tornadoes:* A record-breaking 169 tornadoes, more than three times as many as the previous monthly record for January of 52 tornadoes set in 1975, occurred in January 1999. A new tornado detection algorithm, installed in all local offices in November 1998, enabled forecasters to issue timely and accurate tornado warnings with lead times varying from 16 - 43 minutes. As a result, people were able to get out of harm's way.
- Completed Advanced Weather Interactive Processing System (AWIPS) Deployment:* The last AWIPS baseline system, an interactive weather computer and communications system that will help provide better weather and flood-related services to the country, was installed during June 1999. The installation of AWIPS completes a decade-long effort to revamp weather services and significantly improve weather forecasting. AWIPS has already demonstrated improvements in NOAA's ability to perform its mission by providing the forecasters with advanced capabilities to deliver enhanced warnings and forecasts to the public in severe weather situations.
- Received Top Award from Computerworld and Smithsonian Institution for AWIPS:* The AWIPS earned a top award in the Computerworld Smithsonian Awards program for using technology in an innovative way to create positive and economic change to benefit society. Winner in the Environment, Energy and Agriculture category, the AWIPS was the only federal award winner, with other categories won by some of the Nation's premier corporations.



ASTWFS

- *Completed Delivery of All NOAA Weather Radio (NWR) Console Replacement Systems:* The final NWR Console Replacement System was delivered in November 1998. The consoles provide automated generation of NWR broadcasts of weather forecasts and warnings.
- *Conducted Hurricane Awareness Tours:* NOAA hurricane experts conducted hurricane awareness tours in Central America, the Caribbean, and East and Gulf Coast of the U. S. to promote outreach, public education and teamwork for the 1999 hurricane season. Tours in Nicaragua, Honduras, the Dominican Republic, Puerto Rico, and Cuba played an important role in the exchange of information on the international capabilities, procedures and technologies used to forecast hurricanes.
- *Successfully Completed Winter Storm Reconnaissance Program:* During January and February 1999, NOAA successfully conducted a winter reconnaissance dropsonde mission over the northeast Pacific. Critical atmospheric data, collected by NOAA's Gulfstream IV aircraft and the Air Force C-130's, was used in numerical weather prediction models and resulted in improved forecasts and warnings for the West Coast.
- *Observed 80th Anniversary of First Aviation Forecast:* During FY 1999, the NOAA celebrated its 80th anniversary of the first aviation forecast. NOAA's NWS issues thousands of aviation forecasts, advisories and warnings to make flying safe and efficient.
- *Began Issuing Alerts and Warnings of Geomagnetic Storms based on the Advanced Composition Explorer (ACE) Data:* Since the ACE became operational in December 1998, NOAA's Space Environment Center issued more than 29 geomagnetic storm warnings. Real time solar wind data from the ACE satellite has enable forecasters to make predictions, with lead times up to one hour. This information is critical to electric utility companies, communication companies, and other space weather service agencies.



Key FY 2001 Activities:

- Sustain NWS base operations
- Provide an adequate preventative and cyclical facilities maintenance program
- Provide operation and maintenance support for 152 fielded Advanced Weather Interactive Processing Systems (AWIPS)
- Continue AWIPS Build 5.0 development activities (2nd year of 3 year effort)
- Continue NEXRAD and ASOS product improvement initiatives

ASTWFS

- Acquire, deploy, and install Doppler weather radar for the Evansville, IN area as recommended by the Modernization Transition Committee (MTC)
- Continue lease payments on the Class VIII supercomputer
- Continue the radiosonde replacement program to ensure critical upper air data
- Continue the procurement, launching, and operation of polar orbiting satellites and the follow-on series of geostationary weather satellites
- Improve geomagnetic and ionospheric storm predictions through acquisition of additional advanced satellite and surface observations
- Continue the national implementation of the Advanced Hydrologic Prediction Service (AHPS) in the Upper Midwest and tributaries within the upper Ohio River Basin
- Upgrade and expand the NOAA Weather Radio (NWR) network with the acquisition of 30 new transmitters and an improved voicing capability
- Perform research to improve the forecast accuracy and lead-time for hurricane tracking and landfall prediction through assessments, analysis of enhanced data sets, and simulations.
- Complete enhancement of a research-grade WSR-88D radar to include dual-polarization capabilities and evaluate the ability of quantitatively estimate precipitation amounts
- Continue simulations under the North America Observing System Council to evaluate potential forecast improvements through selected GOES imager and sounder data.
- Complete development of advanced observing systems such as an Advanced Microwave Sounding Radiometer and a buoy-based wind profiler system
- Implement Warning Decision Support System technology into AWIPS/System for Convective Analysis and Nowcasting
- Improve public awareness/preparedness of hazardous weather, and develop new techniques for detecting and tracking volcanic ash, and expand the framework of the Global Disaster Information network (GDIN)
- Begin detailed planning and project development associated with the construction of a new facility and renovation of existing facilities to house NOAA operational and research centers at the University of Oklahoma
- Support for the Department's Natural Disaster Reduction Initiative (NDRI).

Key Performance Measures

| | 1996 act. | 1997 act. | 1998 act. | 1999 prelim | 2000 est. | 2001 est. |
|------------------------------|--------------|--------------|--------------|----------------|--------------|--------------|
| Tornado Warnings | | | | | | |
| Lead Time (minutes) | 10 | 10 | 11 | 12 | 12 | 13 |
| Accuracy (percent) | 59 | 59 | 66 | 70 | 70 | 70 |
| * False Alarm Rate (percent) | | | | 72 | 65 | 59 |

ASTWFS

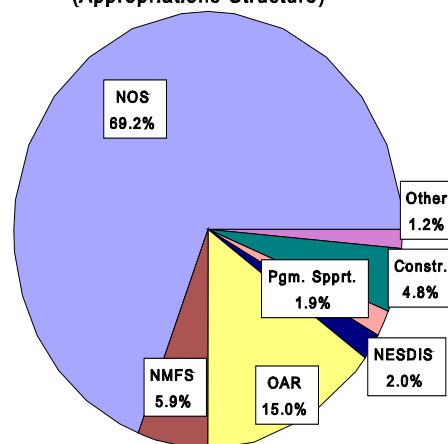
| | | | | | | |
|--|----------|----------|----------|----------|----------|----------|
| Flash Flood Warnings Lead Time (minutes) Accuracy (percent) | 39 79 | 45 82 | 52 85 | 41 83 | 55 86 | 57 86 |
| Winter Storm Warnings * Lead Time (hours) * Accuracy (percent) | | | | 11 85 | 12 85 | 13 86 |
| Hurricane Warnings * Lead Time (hours) | | | | 23 | 20 | 21 |
| Aviation Forecasts (Ceiling/Visibility) * Accuracy (percent) * False Alarm Rate (percent) | | | | 19 52 | 20 50 | 21 46 |
| Marine Forecasts (Wind/Wave) * Accuracy (percent) | | | | 50 | 51 | 53 |
| Precipitation Forecasts * Accuracy of 3-day Forecast (percent) | | | | | 20 | 22 |
| * Represents new measures | | | | | | |

Sustain Healthy Coasts

Total Request: \$483,317,000



Participation by Activity
(Appropriations Structure)



Vision - By 2005, the Nation's coasts will have more productive and diverse habitats for fish and wildlife, and cleaner coastal waters for recreation and the production of seafood. Coastal communities will have thriving, sustainable economies based on well-planned development and healthy coastal ecosystems.

Challenge - Despite progress in developing technology, information and management tools to protect and sustainably use coastal resources, rapid population growth and increasing demands continue to degrade coastal resources and threaten the economic productivity and environmental services of coastal areas. Although these areas comprise only 10 % of U.S. land area, over half of the U.S. population lives on or near the coast, and coastal populations are growing faster than most inland areas. There are many signs that additional efforts are needed to protect the economic and environmental values of U.S. oceans and coasts. In 1998, for example, about one third of 1,062 beaches reporting had at least one advisory or closing, up from 26% in 1997. Polluted runoff and degraded water quality continues to close or restrict the use of nearly 31 % of U.S. shellfish growing waters, and declines in environmental quality continue to threaten coastal communities, businesses, and human health.

SHC

Healthy coastal environments support tourism, recreation, fishing and other industries that generate more than \$100 billion annually in coastal communities across the Nation. Coastal wetlands, estuaries, coral reefs and other areas provide essential feeding and nursery habitats for approximately 70 percent of all U.S. commercial and recreational fisheries species. Maintaining the health, productivity and biodiversity of coastal ecosystems is challenging but essential to sustainable development of coastal economies and the future welfare of the Nation.

Implementation Strategy - The goal of Sustain Healthy Coasts encompasses the following objectives:

- Protect, conserve and restore coastal habitats and their biodiversity.
- Promote clean coastal waters to sustain living marine resources and ensure safe recreation, healthy seafood, and economic vitality.
- Foster well-planned and revitalized coastal communities that sustain coastal economies, are compatible with the natural environment, minimize the risks from nature's hazards, and provide access to coastal resources for the public's use and enjoyment.

Benefits - The pursuit of this goal provides information, technology, solutions, and other valuable tools to coastal resource managers at local, state, tribal and Federal levels. NOAA's coastal activities form an integrated suite of monitoring, research, assessment, restoration, information dissemination and resource management programs that enable sound decision making and sustainable development of coastal areas. Federal-state partnerships such as the Coastal Zone Management Program, National Estuarine Research Reserve System, and National Sea Grant College Program are essential components of the Sustain Healthy Coasts goal. Research provides improved understanding of the way in which coastal ecosystems function, and increases the ability to predict how ecosystems and society respond to change, whether natural or caused by humans. The ability to predict change and determine its causes empowers managers and stakeholders to work together to promote sustainable use of coastal resources and mitigate costly damages. NOAA's coastal programs effectively ensure that the Nation's coastal ecosystems are managed for the long-term benefit of the public.

FY 1999 Accomplishments - In FY 1999,

- NOAA helped restore the natural circulation and drainage patterns in over 20,000 acres of coastal wetlands in partnership with the State of Louisiana and other agencies.

- NOAA helped re-opened 3.5 miles of river to salmon as part of community-based habitat restoration projects with private landowners and other partners in Oregon.
- NOAA's National Undersea Research Program (NURP) supported a number of important research and monitoring efforts on marine habitats. For example, the NURP center at the University of Connecticut, in partnership with NMFS and USGS, performed habitat census and habitat/species relationships to monitor the recovery of fish and other species on Georges Bank.
- NOAA Sea Grant in Hawaii worked with the Northwestern Hawaiian Islands Marine Reef Cleanup Team to remove six tons of debris and reduce the impacts of marine debris on Hawaii's coral reefs and wildlife including the endangered Monk Seal. The partnership is now central to continuing efforts to protect Hawaii's fragile coral reef ecosystem.
- NOAA installed navigation beacons to protect fragile coral reefs from ship strikes. As part of the successful settlement for natural resource damages associated with the grounding of the container vessel, Contship Houston, the responsible party purchased eight primary and six backup radio navigation units to enhance navigational safety and help prevent vessel groundings within the boundaries of the Florida Keys National Marine Sanctuary. The beacons should help prevent future groundings and accidents by large vessels in the delicate habitats of the Florida Keys.
- NOAA HAZMAT, Disaster Response Team, and NOAA Corps responded to calls for scientific assistance on more than 120 incidents, including spills of toxics into the Nation's coastal waters (60% oil-related and 28% chemical-related, and 12% other) and the crash of John F. Kennedy, Jr.'s plane.
- NOAA's Workshop to Standardize *Pfiesteria* Monitoring Protocols brought science program managers from state and Federal agencies and scientific experts from academic institutions together to seek consensus on recommendations for standardizing protocols for monitoring *Pfiesteria*-complex events. This workshop has had substantial and lasting benefits to the Nation's understanding of harmful algal blooms and to the availability of credible information to guide natural resource managers in their actions and forecast *Pfiesteria*-complex events.
- Minnesota became the 33rd of 35 eligible states and territories to join the national Coastal Zone Management program. This Federal-state partnership strives to create better planning for resource protection and economic development along the Nation's coasts.

SHC

- Three National Estuarine Research Reserves (NERRs) were added at Guana-Tolomato-Matanzas, Florida; Grand Bay, Mississippi; and Kachemak Bay, Alaska. These additions bring the number of sites in this Federal-state partnership to 25 and double the acreage of land set aside for protection, research, monitoring and education to more than 1 million acres.
- NOAA, in partnership with National Geographic, launched a first-of-its kind exploration of the nation's 12 marine sanctuaries. The Sustainable Seas Expeditions (SSE) utilize sophisticated new submersible technology to explore the ocean and learn how best to protect it. SSE will travel to ocean depths between 100 and 2,000 feet. The goals of this project include undersea exploration, scientific research, and public education and outreach.
- South Carolina Sea Grant researchers, in partnership with the Federal Emergency Management Agency (FEMA), have discovered inexpensive methods of retrofitting houses to withstand high winds during hurricanes and other large storms. The engineers have tested caulk-like adhesives that can increase by a factor of four or five a roof's capacity to withstand hurricane-wind pressures at a cost of about \$1,000.

Key FY 2001 Activities:

- Σ As part of the Lands Legacy Initiative, new funding for the Coastal Zone Management Program will provide grants and technical assistance to coastal states to enable state managers and local communities to better address serious threats to the economic health and livability of coastal areas. This increase will allow coastal states with coastal zone management plans to address the significant and costly impacts of rapidly increasing coastal populations, polluted runoff, deteriorating waterfront areas, and loss of coastal habitats.
- Σ As part of the Lands Legacy Initiative, NOAA will establish a Coastal Impact Assistance account will provide coastal states with existing offshore oil and gas production additional resources needed to protect and sustainably use ocean and coastal resources. Funds from the account will provide grants to implement activities that increase protection and sustainable management of coastal resources such as habitat protection, community revitalization, improved coastal access, and public education on coastal issues.
- Σ As part of the Lands Legacy Initiative, NOAA will enhance protection, public education, and monitoring capabilities within the

- Nation's National Marine Sanctuaries and National Estuarine Research Reserves. Funding for these programs will ensure that each Sanctuary and Reserve has the resources needed to protect these valuable, National treasures and provide the access and educational opportunities requested by visitors and local community partners.
- Σ As part of the Lands Legacy Initiative, NOAA's National Ocean Service will take significant new steps to address the Nation's coral reef crisis and reverse the degradation of these rainforests of the sea. Working with state, territorial, and local partners, the new funding will support research, monitoring and local-level projects with states, territories and other partners to reduce human impacts and increase sustainable use of America's valuable coral reefs and will help implement key recommendations of the U.S. Coral Reef Task Force.
- Σ In FY 2001, NOAA will support the Administration's Clean Water Action Plan by strengthening and enhancing its programs that address polluted runoff into coastal watersheds and the impacts of coastal pollution. Activities in support of this plan will include research on hypoxia in the Gulf of Mexico, research on the ecology and oceanography of harmful algal blooms (HABs), and implementation of state Coastal Nonpoint Pollution Control programs that address the impact of polluted runoff.
- As part of the South Florida Ecosystem Restoration Initiative, NOAA will provide key monitoring, research, and management activities in support of a Federal-tribal-state effort to restore and sustain the natural resources of this unique region. For example, the restoration effort depends on NOAA's coastal monitoring and research efforts to track and implement inland restoration efforts that alter water flows to coastal bays and estuaries.
 - NOAA will address aquatic nuisance species issues in marine and coastal areas, a priority item under the National Invasive Species Act, through new funding for both the National Sea Grant College Program and the Great Lakes Environmental Laboratory.
 - NOAA's Office of Oceanic and Atmospheric Research will expand shallow water observatories, develop new deep-sea observatories, and enhance undersea research vehicles through the use of advanced technologies to explore exotic sea life.

Key Performance Measures

| | 1996 act. | 1997 act. | 1998 act. | 1999 act. | 2000 est. | 2001 est. |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| Protection/Restoration of coastal habitats (cum): | | | | | | |
| # Acres restored | 7,000 | 12,000 | 26,000 | 43,000 | 55,000 | 70,000 |
| # Damage cases settled | 23 | 26 | 30 | 37 | 41 | 45 |
| # Interagency restoration projects | 9 | 16 | 20 | 25 | 30 | 55 |
| # Coastal regions with adequate measures to prevent and control aquatic invasive species (total 6 U.S. regions) | - | - | 0 | 0 | 1 | 2 |
| Completion of Coastal protection systems: | | | | | | |
| % State Coastal Nonpoint Pollution Programs approved (% of 35 states) | 0 | 74 | 83 | 83 | 86 | 89 |
| % Coastal watersheds with coastal zone management measures to reduce polluted runoff (% of 1920 total watersheds) | - | - | 0 | 0.3 | 0.6 | 2.2 |
| % State Coastal Zone Management Programs completed (% of 35 states) | 83 | 89 | 91 | 94 | 94 | 97 |
| % National Estuarine Research Reserves with upgraded capabilities | 5 | 10 | 10 | 20 | 31 | 45 |
| % National Marine Sanctuaries at baseline operational level | 0 | 8 | 17 | 25 | 33 | 50 |
| % of 40 Key U.S. Coastal Ecosystems With: | | | | | | |
| Reduced risks from hazardous chemicals | 10 | 15 | 20 | 32 | 37 | 42 |
| Assessments of Water quality and natural resources | 20 | 23 | 25 | 28 | 30 | 33 |
| Assessments of levels and effects of toxic contaminants | 15 | 20 | 25 | 28 | 30 | 32 |
| Well-planned Coastal Communities: | | | | | | |
| % coastal areas with improved ability to identify coastal hazards | - | - | - | 5 | 14 | 18 |
| % of coastal constituencies with improved coastal hazard mitigation measures in local planning and regulatory activities | - | - | - | 0 | 7 | 10 |

NATIONAL
OCEAN
SERVICE
(\$ IN
THOUSAND
S)

FY 2001

Crosscut Operations, Research and Facilities

Initiative

FY
2000
Revised

Conf
/
Enacted

FTE

AMOUNT

FY
2001
Adjustments
to
Base

FTE

AMOUNT

FY
2001
Program

Change

FTE

AMOUNT

FY
2001
President's
Request

FTE

AMOUNT

Change from

FY 2000
Revised

Conf./Enacted

Navigation Services

Mapping and Charting

(Mapping and Charting Base)

(Electronic Navigational Charts)

(Shoreline Mapping)

(Joint Hydrographic Ctr)

(Stream quality monitoring)

Address Survey Backlog/Contracts

Geodesy

(Geodesy Base)

(National Spatial Reference System)

(Height Modernization Study)

(Narragansett Bay Survey)

(S. Carolina Geodetic Survey)

(Nat'l Heights Modernization Study)

Great Lakes Y2K Compliance

Tide and Current Data

(PORTS)

238

34,979
[32,594]

658

1

2,819
[1,319]
[1,500]

239

38,456
[33,057]
[1,319]
[1,500]
[2,580]

3,477

0
197

18,828
20,011
[19,086]
[462]
[462]

3
547

0

(831)
(352)
0
[572]
0
0
0
0
0

197

18,000
20,206
[19,634]
[572]
0
0
0
0
0

(828)
195
0
0
0
0
0
0
0

141

389
11,954

339

0

(389)
2,796
[2,796]

141

15,089
[2,796]

(389)
3,135

0

0

| | | | | | | | | | | |
|----|--|-----|----------|----|-------|---|---------|-----|----------|---------|
| | (Coastal Forecast System) | | | | | | | | | 0 |
| | Subtotal | 576 | 86,161 | 0 | 1,547 | 1 | 4,043 | 577 | 91,751 | 5,590 |
| | Ocean Resources Conservation and Assessment | | | | | | | | | |
| | Estuarine and Coastal Assessment | | | | | | | | | |
| | Oceanic and Coastal Research | 61 | 8,406 | | 94 | 0 | 0 | 61 | 8,500 | 94 |
| | (Marine Environmental Health Research Lab Op Cost) | | [462] | | | | 0 | | [500] | 0 |
| F. | (Pfiesteria/Toxins Research Charleston Lab) [CWI | | [1,000] | | | | 0 | | [1,000] | 0 |
| | Base] | | | | | | | | | |
| | | | | | | | 0 | | | 0 |
| | GLERL (Moved from OAR base funding) | | | 60 | 6799 | 0 | (714) | 60 | 6,085 | 6,085 |
| | Ocean Assessment Program (OAP) | 175 | 43,762 | 5 | 941 | 0 | (3,238) | 180 | 41,465 | (2,297) |
| | (BASE OAP) | | [12,637] | | | | 0 | | [12,717] | 0 |
| | (Beaufort/Oxford) | | [2,427] | | | | 0 | | [2,923] | 0 |
| F. | (Pfiesteria and HAB Rapid Response) | | [3,425] | | | | [1,750] | | [5,175] | 0 |
| | (Pfiesteria Research SC Dept of Marine Resources) | | [462] | | | | | | | 0 |
| | (Pfiesteria Research NC State) | | [500] | | | | | | | 0 |
| E. | (South Florida Ecosystem) | | [897] | | | | [1,003] | | [1,900] | 0 |
| | (Coop Institute for Coastal and Estuarine Enviro | | [5,361] | | | | 0 | | [3,000] | 0 |
| | Tech) | | | | | | | | | |
| | (Joint Institute for Coastal Habitat-LSU) | | | | | | | | | 0 |
| | (Coastal Services Center (CSC)- base) | | [12,452] | | | | 0 | | [13,750] | 0 |
| | (Coastal Hazards Research) | | [2,311] | | | | | | | 0 |
| | (Community Sustainability Center O & M-SC) | | [92] | | | | | | | 0 |
| | (Pacific Coastal Sevices Center-HI) | | | | | | | | | 0 |
| | (Hawaii Coral Reef Monitoring) | | [924] | | | | | | | 0 |
| | (Florida Coral Reef Monitoring) | | [462] | | | | | | | 0 |
| | (Puerto Rico Coral Reef Monitoring) | | [462] | | | | | | | 0 |
| | (JASON Education and Outreach) | | [1,849] | | | | 0 | | [2,000] | 0 |
| | Response and Restoration | 115 | 15,295 | 2 | 354 | 2 | 4,500 | 119 | 20,149 | 4,854 |
| B. | (Coral Restoration) | | [6,000] | | | | [4,000] | | [10,000] | 0 |
| | (State Lead Clean-ups) | | | | | | | | | 0 |
| | (CERCLA 106) | | | | | | | | | 0 |
| | (Restoration Methods) | | | | | | | | | 0 |
| | (Estuarine and Coastal Assessment) | | [2,664] | | | | | | [2,674] | 0 |
| | (Damage Assessment Program) | | [5,135] | | | | | | [5,210] | 0 |
| | (Oil Pollution Act of 1990) | | [996] | | | | 0 | | [1,000] | 0 |
| F. | (Coastal Resource Coordination) | | [500] | | | | [500] | | [1,000] | 0 |
| | Ocean Services | | | | | | | | | 0 |
| | Subtotal | 351 | 67,463 | 67 | 8,188 | 2 | 548 | 420 | 76,199 | 8,736 |

| | | | | | | | | | | |
|------------------------------|---|-----|----------|----|-------|----|----------|-----|----------|---------|
| Coastal Ocean Science | | | | | | | | | | |
| | Coastal Ocean Program | 21 | 17,145 | | 87 | 0 | 1,000 | 21 | 18,232 | 1,087 |
| | (Coastal Ocean Program - Base) | | [11,656] | | | | 0 | | [11,732] | 0 |
| | (ECOHAB) | | [3,597] | | | | [603] | | [4,200] | 0 |
| | (Hypoxia) | | [598] | | | | 0 | | [1,000] | 0 |
| | (South Florida Ecosystem) in Base | | [1,295] | | | | 0 | | [1,300] | 0 |
| | (GLOBEC) | | | | | | | | | 0 |
| | (Aquaculture) | | | | | | | | | 0 |
| | Subtotal | 21 | 17,145 | 0 | 87 | 0 | 1,000 | 21 | 18,232 | 1,087 |
| | Total, Ocean Resources Conserv. & Assess. | 372 | 84,608 | 67 | 8,275 | 2 | 1,548 | 441 | 94,431 | 9,823 |
| Ocean and Coastal Management | | | | | | | | | | |
| Coastal Management | | | | | | | | | | |
| B. | CZM Administration * | 49 | 483 | 0 | 3,308 | 11 | 2,817 | 60 | 6,608 | 6,125 |
| B. | CZM grants (\$2.0 million increase and \$6.0 million total also in CWI) | | 54,700 | | 0 | | 92,700 | | 147,400 | 92,700 |
| | CZM 309 grants | | | | | | | | 0 | 0 |
| | CZM Section 310 Grants | | | | | | | | | 0 |
| | (CICEET) | | | | | | | | | 0 |
| B. | National Estuarine Research Reserve | | 6,000 | | | | 6,000 | | 12,000 | 6,000 |
| B. | Nonpoint Pollution Control (\$2.0 million increase also in CWI) | | 2,500 | | | | 2,000 | | 4,500 | 2,000 |
| | Funded in Coastal Zone Management Fund | -49 | | 49 | | 0 | 0 | 0 | 0 | 0 |
| | Subtotal | 0 | 63,683 | 49 | 3,308 | 11 | 103,517 | 60 | 170,508 | 106,825 |
| Ocean Management | | | | | | | | | | |
| B. | Marine Sanctuary Program | 112 | 22,924 | 5 | | 12 | 9,076 | 129 | 32,000 | 9,076 |
| | (Marine Sanctuary Program) | | [22,000] | | | | [10,000] | | [32,000] | 0 |
| | (Build Capacity/Chartacterization) | | | | | | | | | 0 |
| | (Enforcement) | | | | | | | | | 0 |
| | (Marine Debris Conference) | | [462] | | | | | | | 0 |
| | (Northwest Straits Citizens Advisory Commission) | | [462] | | | | | | | 0 |
| | Subtotal | 112 | 22,924 | 5 | 0 | 12 | 9,076 | 129 | 32,000 | 9,076 |
| | Total, Ocean and Coastal Management | 112 | 86,607 | 54 | 3,308 | 23 | 112,593 | 189 | 202,508 | 115,901 |
| | Acquisition of Data | 231 | 15,487 | | (355) | 0 | 2,114 | 231 | 17,246 | 1,759 |
| G. | (Acquisition of Data - \$1.8 million in America's | | | | | | [1,759] | | [1,759] | |

Ocean Future)

| | | | | | | | | | |
|-----------|-------|---------|-----|--------|----|---------|-------|---------|---------|
| TOTAL NOS | 1,291 | 272,863 | 121 | 12,775 | 26 | 120,298 | 1,438 | 405,936 | 133,073 |
|-----------|-------|---------|-----|--------|----|---------|-------|---------|---------|

* CZM Administration change from FY 2000 Enacted is counted in Lands Legacy at \$2.1 million due to changes in CZM Fund.

| FY 2001 Cross Cut Initiatives | INCREASE | REQUEST |
|---|----------|---------|
| A.. NDRI - Natural Disaster Reduction Initiative | | |
| B. Lands Legacy Initiative | 116800 | 212508 |
| C. Climate Services and Observation Initiative | | |
| D. Minority Serving Institutions Initiative | | |
| E. South Florida Ecosystem Restoration Initiative | 1000 | 1900 |
| F. Clean Water Initiative | 6953 | 11675 |
| G. America's Ocean Future Initiative | 7946 | 7946 |
| Total, NOS Crosscut Initiatives Participation | 132699 | 234029 |

NOAA FY 2001 BUDGET REQUEST
OCEANIC AND ATMOSPHERIC RESEARCH (OAR)

| | FY 2000 Revised Enacted Amount FTE | \$ (000s) | FY 2001 Reques ted Change Amount FTE | \$ (000s) | FY 2001 Preside nt's Request Amount FTE | \$ (000s) |
|---|--|-----------|--|-----------|--|-----------|
| OPERATIONS, RESEARCH AND FACILITIES (ORF) | | | | | | |
| Climate and Air Quality Research | | | | | | |
| Interannual & Seasonal Climate Research | 27 | \$16,692 | 0 | (\$1,706) | 27 | \$14,986 |
| Subtotal | 27 | 16,692 | 0 | (1,706) | 27 | 14,986 |
| Long-Term Climate & Air Quality Research | 224 | 29,886 | 2 | 639 | 226 | 30,525 |
| High Performance Computing | 6 | 12,702 | 0 | 48 | 6 | 12,750 |
| Subtotal | 230 | 42,588 | 2 | 687 | 232 | 43,275 |
| Climate and Global Change | 118 | 66,602 | 0 | 493 | 118 | 67,095 |
| GLOBE | 9 | 3,000 | 0 | 2,000 | 9 | 5,000 |
| Subtotal | 127 | 69,602 | 0 | 2,493 | 127 | 72,095 |
| Climate Observations & Service | 0 | 0 | 4 | 24,000 | 4 | 24,000 |
| Subtotal | 0 | 0 | 4 | 24,000 | 4 | 24,000 |
| Total, Climate and Air Quality | 384 | 128,882 | 6 | 25,474 | 390 | 154,356 |
| Atmospheric Programs | | | | | | |
| Weather Research | 228 | 37,100 | 2 | (25) | 230 | 37,075 |
| STORM (Univ of Northern Iowa) | | 1,849 | | (1,849) | | 0 |
| Wind profiler | | 4,333 | | 17 | | 4,350 |
| Subtotal | 228 | 43,282 | 2 | (1,857) | 230 | 41,425 |
| Solar-Terrestrial services and research | 65 | 6,902 | 0 | (720) | 65 | 6,182 |

| | | | | | | |
|--------------------------------|-----|--------|------|----------|-----|--------|
| Total, Atmospheric Program | 293 | 50,184 | 2 | (2,577) | 295 | 47,607 |
| Ocean and Great Lakes Programs | | | | | | |
| Marine Environmental Research | 99 | 26,471 | 0 | (3,876) | 99 | 22,595 |
| GLERL | 60 | 6,799 | (60) | (6,799) | 0 | 0 |
| Subtotal | 159 | 33,270 | (60) | (10,675) | 99 | 22,595 |
| Sea Grant | | | | | | |
| Sea grant college program | 22 | 58,630 | 0 | 620 | 22 | 59,250 |
| Subtotal | 22 | 58,630 | 0 | 620 | 22 | 59,250 |

NOAA FY 2001 BUDGET REQUEST

OCEANIC AND ATMOSPHERIC RESEARCH (OAR)

| | FY 2000 | | FY 2001 | | FY 2001 | |
|---|---------|-----------|---------|-----------|---------|-----------|
| | Revised | | Reques | | Preside | |
| | Enacted | | ted | | nt's | |
| | Amount | | Change | | Request | |
| | FTE | \$ (000s) | FTE | \$ (000s) | FTE | \$ (000s) |
| OPERATIONS, RESEARCH AND FACILITIES (ORF) - Continued | | | | | | |
| Undersea Research Program | | | | | | |
| NOAA Undersea Research Program | 8 | 13,748 | 0 | (7,998) | 8 | 5,750 |
| Subtotal | 8 | 13,748 | 0 | (7,998) | 8 | 5,750 |
| Total, Ocean & Great Lakes Programs | 189 | 105,648 | (60) | (18,053) | 129 | 87,595 |
| Acquisition of Data | 117 | 12,903 | 0 | 49 | 117 | 12,952 |
| SUBTOTAL, OAR - ORF | 983 | 297,617 | (52) | 4,893 | 931 | 302,510 |

PROCUREMENT, ACQUISITION AND CONSTRUCTION (PAC)

Systems Acquisition

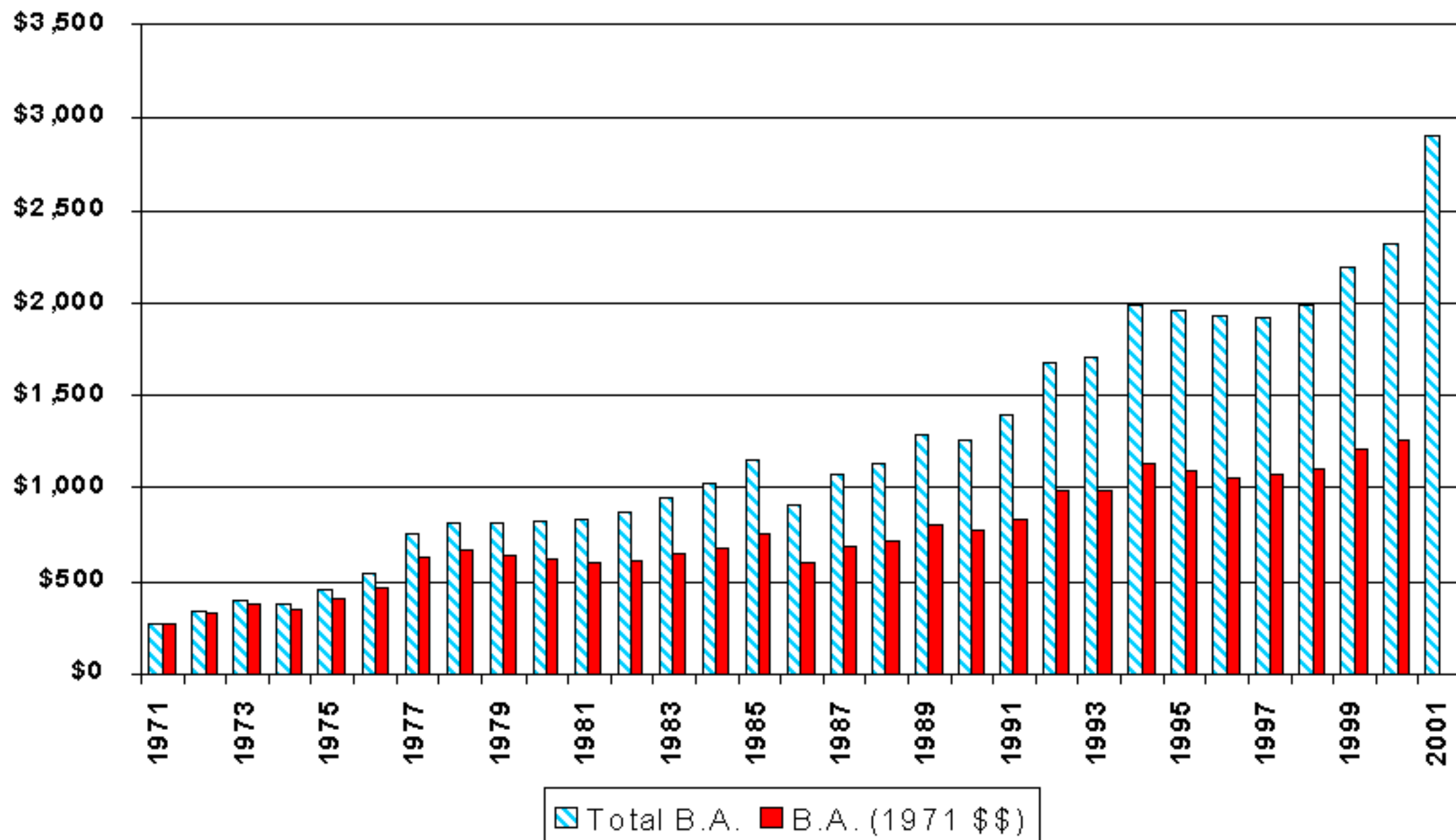
| | | | | | | |
|---------------------------------------|-----|-----------|------|----------|-----|-----------|
| GFDL Supercomputer | 0 | 4,981 | 0 | 2,019 | 0 | 7,000 |
| National Data Archive | 0 | 0 | 0 | 4,000 | 0 | 4,000 |
| SUBTOTAL, OAR - PAC | 0 | 4,981 | 0 | 6,019 | 0 | 11,000 |
| TOTAL, OCEAN AND ATMOSPHERIC RESEARCH | 983 | \$302,598 | (52) | \$10,912 | 931 | \$313,510 |

| NOAA FY 2001 BUDGET REQUEST | | | | | | |
|---|---------|-----------|--------|-----------|---------|-----------|
| FACILITIES | | | | | | |
| | FY 2000 | | FY | | FY 2001 | |
| | Revised | | 2001 | | Preside | |
| | Enacted | | Reques | | nt's | |
| | Amount | | ted | | Request | |
| | FTE | \$ (000s) | FTE | \$ (000s) | FTE | \$ (000s) |
| OPERATIONS, RESEARCH AND FACILITIES (ORF) | | | | | | |
| Facilities | | | | | | |
| NOAA Facilities Maintenance | 6 | \$1,802 | 0 | \$139 | 6 | \$1,941 |
| Environmental Compliance | 9 | 1,992 | 0 | 1,907 | 9 | 3,899 |
| NARA Records Management | 0 | 0 | 0 | 262 | 0 | 262 |
| Boulder | 0 | 3,835 | 0 | 1,515 | 0 | 5,350 |
| SUBTOTAL, FACILITIES - ORF | 15 | 7,629 | 0 | 3,823 | 15 | 11,452 |
| PROCUREMENT, ACQUISITION AND CONSTRUCTION (PAC) | | | | | | |
| Construction | | | | | | |
| Norman Consolidation Project | 0 | 0 | 0 | 3,000 | 0 | 3,000 |
| SUBTOTAL, FACILITIES - PAC | 0 | 0 | 0 | 3,000 | 0 | 3,000 |
| TOTAL, FACILITIES | 15 | \$7,629 | 0 | \$6,823 | 15 | \$14,452 |

NOAA BUDGET GROWTH

FY 1971 - FY 2001

\$ in Millions



**NOAA SOUTH FLORIDA PROGRAM
FY 2001 REQUEST
(IN MILLIONS)**

| Project | SP | FY 2000 Enacted | FY 2001 Request | Increases/ (Decreases) |
|------------------------------------|-----------|----------------------------|----------------------------|-----------------------------------|
| SOUTH FLORIDA -- ORF | | | | |
| NOS | | | | |
| South Florida Ecosystem / COP | SHC | 1.3 | 1.3 | 0.0 |
| South Florida / OAP | SHC | 0.9 | 1.9 | 1.0 |
| | | | | |
| NMFS | | | | |
| Resource Information | | 1.3 | 1.9 | 0.6 |
| | | | | |
| Total South Florida Funding | | 35 | 51 | 16 |

**SUMMARY OF NDRI INITIATIVES
FY 2001 REQUEST
(IN MILLIONS)**

| Project | SP | FY 2000 Enacted | FY 2001 Request | Increases/ (Decreases) |
|-----------------------------------|--------|--------------------|--------------------|---------------------------|
| NDRI -- ORF | | | | |
| OAR | | | | |
| SWRP | ASTWFS | 1.0 | 2.0 | 1.0 |
| | | | | |
| | | | | |
| NWS | | | | |
| Maintain Current Services: | | | | |
| Adjustments-to-base (ATBs) | ASTWFS | 0.0 | 14.7 | 14.7 |
| Sustain base operations | ASTWFS | 0.0 | 8.4 | 8.4 |
| Modernize and update COOP network | ASTWFS | 0.0 | 2.3 | 2.3 |
| WFO Maintenance | ASTWFS | 3.2 | 5.2 | 2.0 |
| | | | | |
| | | | | |
| Systems Acquisition: | | | | |
| NEXRAD Operations | ASTWFS | 38.7 | 38.8 | 0.1 |
| ASOS | ASTWFS | 7.3 | 7.4 | 0.1 |
| AWIPS | ASTWFS | 32.0 | 38.5 | 6.5 |
| | | | | |
| NESDIS | | | | |
| GIN | ASTWFS | 0.0 | 5.5 | 5.5 |
| EOS | ASTWFS | 52.9 | 53.9 | 1.0 |
| | | | | |
| | | | | |
| Subtotal ORF | | 1351 | 1768 | 416 |

**SUMMARY OF NDRI PROGRAM
FY 2001 REQUEST
(IN MILLIONS)**

| Project | SP | FY 2000 Enacted | FY 2001 Request | Increases (Decreases) |
|----------------------------|-----------|----------------------------|----------------------------|----------------------------------|
| NDRI -- PAC | | | | |
| NEXRAD | ASTWFS | 8.2 | 9.6 | 1.3 |
| ASOS | ASTWFS | 3.8 | 5.1 | 1.3 |
| AWIPS | ASTWFS | 15.9 | 17.3 | 1.4 |
| Computer Facility upgrades | ASTWFS | 11.1 | 15.1 | 4.0 |
| Radiosonde Replacement | ASTWFS | 7.0 | 7.0 | 0.0 |
| NOAA Weather Radio | ASTWFS | 0.0 | 6.2 | 6.2 |
| Evansville Doppler Radar | ASTWFS | 0.0 | 5.5 | 5.5 |
| NOAA K-N (NESDIS) | ASTWFS | 130.5 | 137.0 | 6.5 |
| Polar Convergence (NESDIS) | ASTWFS | 59.8 | 76.7 | 16.9 |
| GES I-M (NESDIS) | ASTWFS | 76.8 | 58.6 | -18.2 |
| GES N-Q(NESDIS) | ASTWFS | 188.8 | 232.2 | 43.4 |
| NWS WFO Construction | ASTWFS | 9.5 | 9.5 | 0.0 |
| | | | | |
| Subtotal PAC | | 5114 | 5799 | 684 |
| | | | | |
| Total NDRI Funding | | 6466 | 7566 | 1100 |